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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,328	10/13/2000	Shahzad Ebrahimiian	12568US04	1219

7590

08/20/2002

Robert W Fieseler
McAndrews Held & Malloy Ltd
500 West Madison Street
34th Floor
Chicago, IL 60661

EXAMINER

SZEKELY, PETER A

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 08/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicant(s) Am	
	EBRAHIMIAN ET AL.	
	Application No. 09/688,328	Art Unit 1714
Examiner Peter Szekely		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. A nanoclay have to have dimensions of less than micron, i.e. its dimensions have to be measured with nanometers. Applicants' particles are not nanoscale particles. The treatment of the particles is not described, and one of ordinary skill in the art would not know whether to treat the clay particles with a polymer or with axle grease in order to make them hydrophobic. "Modified" covers a multitude of sins. Judging from applicants' description, montmorillonite particles, which are not intercalated, would work if they were ground to a particle size of one micron, which is clearly not the case, judging from the cited references.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-9, 11, 14-20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sibilis 5,310,775, in view of Beall et al. 5,578,672, further in view of Kawasumi et al. 4,810,734, Vaia et al. 5,955,535 or Ellsworth 5,962,553
4. Claims 10,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sibilis et al. 5,310,775, in view of Beall et al. 5,578,672, further in view of

Kawasumi et al. 4,810,734, Vaia et al. 5,995,535 or Ellsworth 5,962,553, and even further in view of Kutnyak et al. 4,356,284 or Thulliez et al. 6,054,538.

5. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sibilia et al. 5,310,775, in view of Beall et al. 5,578,672, further in view of Kawasumi et al. 4,810,734, Vaia et al. 5,995,535 or Ellsworth 5,962,553, and even further in view of Day et al. 6,217,797 or Day et al. 6,355,277.

Response to Arguments

6. Applicant's arguments filed 06/18/02 have been fully considered but they are not persuasive. The "Fluoropolymers" of Mr. Scheirs notwithstanding, applicants define their claimed fluoropolymers as "flouroelastomers" in their own specification. See the Title, page 1, lines 6, 11 and 24, page 2, lines 6 and 29, page 3, line 28, page 4, line 3 and page 6, line 4. Thus applicants, who can be their own lexicographers, defined flouroelastomers as being included in their application. Applicants' claims are directed to a composition, which comprises nanoclay and fluoropolymer. As long as this composition is disclosed by the cited references, it is assumed the identical compositions will have identical properties, that is the properties are inherent in the composition. As far as the new claims are concerned, Vaia et al. teach PVDF in column 2, line 29, and the two patents by Day et al. reveal the blend of PVDF and melamine octamolybdate in Table 5. See also claims 2 and 7 of the ('277) patent. These disclosures make the inclusion of melamine octamolybdate patently obvious.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is 703-308-2460. The examiner can normally be reached on Tuesday-Friday 7:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-873-9311 for regular communications and 703-872-9310 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read 'Peter Szekely', written in a cursive style.

Peter Szekely
Primary Examiner
Art Unit 1714

P.S.
August 17, 2002